

ABSTRACT

An austenitic stainless steel excellent in high temperature strength, high temperature ductility and hot workability, consisting of, by mass %, C : more than 0.05 % to 0.15 %, Si : 2 % or less, Mn : 0.1 to 3 %, P : 0.04 % or less, S : 0.01 % or less, Cr : more than 20 % to less than 28 %, Ni : more than 15 % to 55 %, Cu : more than 2 % to 6 %, Nb : 0.1 to 0.8 %, V : 0.02 to 1.5 %, sol. Al : 0.001 to 0.1 %, but sol. Al $\leq 0.4 \times N$, N : more than 0.05 % to 0.3 % and O (Oxygen) : 0.006 % or less, but O $\leq 1/(60 \times Cu)$, and the balance Fe and impurities. The austenitic stainless steel may contain at least one of Co, Mo, W, Ti, B, Zr, Hf, Ta, Re, Ir, Pd, Pt and Ag, and/or at least one of Mg, Ca, Y, La, Ce, Nd and Sc.